AMENDMENT UNDER 37 C.F.R. § 1.111
Appln. No. 10/631,894
Docket No. Q76385

AMENDMENTS TO THE SPECIFICATION

Please amend the third full paragraph of page 1 as follows:

Conventionally, fuel cells, which ~~constantly~~ generate power continuously, have been devised (for example, see Japanese Patent Application Laid-Open (JP-A) No. 6-163965). Among these fuel cells, those that have drawn public attention as a high capacity power supply for a portable device such as a digital camera are polymer electrolyte fuel cells (PEFC). Among these PEFCs, a direct methanol fuel cell (DMFC), which directly supplies a methanol aqueous solution to a cell, is suitable for miniaturization of a device since it requires no peripheral assistant devices such as a modifying device for forming hydrogen from methanol and a reformer used for controlling carbon dioxide concentration.

Please amend the first full paragraph of page 2 as follows:

As shown in Fig. 14, in the DMFC, electricity is generated through a chemical reaction between the methanol aqueous solution ($CH_3\cancel{CO}OH + H_2O$) and oxygen (O_2). A single cell 100, which is a minimum constituent unit, has a structure in which two electrodes, that is, an anode (fuel electrode) 104 and a cathode (air electrode) 106, sandwich a thin film that is referred to as a proton conductive membrane 102. The methanol aqueous solution serving as a fuel is decomposed into hydrogen ions (H+), electrons (e–) and carbon dioxide (CO_2) through a catalytic action of the anode 104.

Please delete the second and third full paragraphs of page 7.

Please amend the third full paragraph of page 20 as follows:

Moreover, in the center of the casing 64 in the width direction (i.e., the left-right direction of Fig. 3), a sheet material 66 made of a material having flexibility and an alcohol resistant property (for example, ~~Teflon~~TEFLON ® rubber) is disposed therein. The casing 64 is separated by the sheet material 66, and thus, is formed into a structure having two tanks.

Please amend the fourth paragraph of page 17 as follows:

As shown in Fig. 1, a fuel pack 10, filled with a methanol aqueous solution (~~CH_3COOH~~ CH_3OH + H_2O), is loaded to a housing section 17 which is provided from above in a digital camera C ~~from above~~. A direct methanol fuel cell (hereinafter, referred to as fuel cell) 12, which generates power through a chemical reaction between the methanol aqueous solution and oxygen (O_2), and produces water (H_2O) as a by-product, is disposed on the bottom of the housing section 17. This fuel cell 12 and the fuel pack 10 are connected to each other in a watertight state, with a fuel supply port 74 being fitted to a solution supply port 52 and a discharged-solution recovery port 76 being fitted to a solution discharge port 54.

Please amend the paragraph bridging pages 24 and 25 as follows:

As shown in Fig. 6, in the fuel pack 90, a fuel supply port 91 and a discharged-solution recovery port 92 are disposed in alignment on the same straight line via a ~~the~~ fuel storing section 93 and a discharged-solution storing section 94. As shown in Fig. 7, the fuel pack 90 is loaded to a housing section 95 from a side face of the digital camera C.

Please amend the second and third full paragraphs of page 25 as follows:

Next, a fuel pack ~~100~~110 in accordance with a fourth embodiment will be described. Here, members that are the same as those of the first to third embodiments are represented by the same reference numerals, and the description thereof is omitted.

As shown in Fig. 8, the fuel pack ~~100~~110 is provided with a casing 112. The casing 112 has a rectangular pillar shape with one of the top faces in the longitudinal direction being opened. A cap 114 is attached to the opening portion of the casing 112, and the opening portion is sealed.

Please amend the paragraph bridging pages 25 and 26 as follows:

The discharge solution bag 126 is filled with a granular desiccant 128 such as silica gel or the like. Each particle of the desiccant 128 has fine pores and physically adsorb water vapor that is sent to the discharge solution bag 126 from the fuel cell 12 (see Fig. 3). Thus, it is not necessary to store water recovered from the fuel cell 12 in the discharge solution bag 126 as liquid. In this way it possible to prevent water from leaking out from the fuel pack ~~100~~110, and consequently to prevent problems, such as leak, deterioration in electronic parts and contact failure in terminals, from occurring in the digital camera C (see Fig. 1).

Please amend the second full paragraph of page 26 as follows:

Change of the desiccant 128 is carried out ~~when every predetermined times of~~ whenever fuel refilling operations are carried out a predetermined number of times. First, the number of

fuel-refilling operations is counted by the control unit 26 (see Fig. 2), and when the fuel, which is refilled at the predetermined number of times, has been consumed, a warning signal that urges the replacement of the desiccant 128 is emitted together with a warning signal for urging the refill of the fuel. When the warning signals are emitted, the fuel pack ~~100~~110 is taken out of the digital camera C (see Fig. 1), the cap 114 is removed from the casing 112, and the opening portion 126A of the discharge solution bag 126 is removed from the rib 122. Next, the old discharge solution bag is changed to a new discharge solution bag 126 as shown in Fig. 9A.

Please amend the paragraph bridging pages 27 and 28 as follows:

Note that, an antifreezing agent 132 can be directly filled into the casing 112 ~~indtead~~instead of filling the antifreezing agent 132 into the discharge solution bag 126, and also, in a case in which the casing 112 is made of metal, the antifreezing agent 132 may be formed by coating the surface of sodium chloride and calcium chloride with citric acid, thereby, inhibit corrosion of the casing 112. This is because citric acid, which is eluted prior to the chloride, covers the inner surface of the casing 112 so that the inner surface of the casing 112 becomes unapproachable for salinity, making it possible to reduce the corrosion rate of metal to a level as slow as tap water.